BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer -yelahanka Division

Detailed Estimate

Name of the Work — **Improvements to Roads and drains in Attur Village, Govt School road, Post office road of Attur ward no.03**

Estimate Amount : 5000000.00

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	CIVIL WORKS								
1	Removing & Refixing Stone Slabs of drains and Pointing in C.M(1:3)								
	(Page No 25., I.No.5.33 of KPWD S.R 2016-17)								
		Sqm							
	Basic rate	***76.00***							
	Area Wieght age @ 6%	***4.56***							
	Total Rate in Rs	***80.56***							
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (42 - 87)		1	45	0.75		33.75		
	Ch: (101 - 223)		1	122	0.75		91.50		
	Post office road from Attur main road to Dead end								
	Ch: (0 - 157)		2	157	0.70		219.80		
							345.05		
	Deduction for damaged and open 15%						**-51.76**		
							293.29	**80.56**	**23627.64**
2	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **(Page No142., I.No.19.1 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	***82.00***							
	Area Wieght age @ 6%	***4.92***							
	Total Rate in Rs	***86.92***							
	New drain								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	1.20	0.700	73.08		
	Culvert		1	8	1.80	0.700	10.08		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (208 - 223)		1	15	1.20	0.700	12.60		
	Culvert		2	7	1.80	0.700	17.64		
	Desilting								
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (42 - 87)		1	45	0.50	0.500	11.25		
	Ch: (101 - 223)		1	122	0.50	0.500	30.50		
	Post office road from Attur main road to Dead end								
	Ch: (0 - 157)		2	157	0.45	0.500	70.65		
	Cross Road from Veerabhadreshwra temple road to Dead end								
	Ch: (0 - 45)		2	45	0.45	0.500	20.25		
							246.05	**86.92**	**21386.67**
3	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2								

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	(Page No 12., I.No.4.2 of KPWD S.R 2016-17).								
	Basic rate	**Cum.**							
	Area Wieght age @ 6%	***5046.00***							
	Total Rate in Rs	***302.76***							
	New drain	***5348.76***							
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	0.90	0.100	7.83		
	Culvert		1	8	1.50	0.100	1.20		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (208 - 223)		1	15	0.90	0.100	1.35		
	Culvert		2	7	1.50	0.100	2.10		
							12.48	**5348.76**	**66752.52**
4	Providing and laying Plain /reinforced cement concrete for side drains wall and bottom thickness 15cm using M20 nominal mix concrete with OPC cement at 300kg with 20mm and down size granite metal coarse aggregate at 0.69 cum and fine aggregate at 0.43 cum machine mixed well compacted for walls at bottom including centring shuttering cost of materials HOM of machineries curing etc completeexcluding cost of steel as per MORTH specification No.1500,1700,2200								
	(Page No265., I.No.37.59.2 of KPWD S.R 2016-17).								
	Basic rate	**Cum.**							
	Area Wieght age @ 6%	***10408.00***							
	Total Rate in Rs	***624.48***							
	New drain	***11032.48***							
	Raft								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	0.90	0.150	11.75		
	Culvert		1	8	1.50	0.200	2.40		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (208 - 223)		1	15	0.90	0.150	2.03		
	Culvert		2	7	1.50	0.200	4.20		
	Wall								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		2	87	0.15	0.800	20.88		
	Culvert		2	8	0.20	0.800	2.56		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (208 - 223)		2	15	0.15	0.800	3.60		
	Culvert		4	7	0.20	0.800	4.48		
							51.89	**11032.48**	**572475.39**
5	KSRB 4.9.2 : Providing T .M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500								
	(Page No 17., I.No.4.46.2 of KPWD S.R 2016-17).								
	Basic rate	**Tonne**							
	Area Wieght age @ 6%	***56050.00***							
	Total Rate in Rs	***3363.00***							
	New drain	***59413.00***							
	Taking 65kg/cum								
							3.37		
							3.37	**59413.00**	**200391.14**

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
6	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. 10cm thick								
	(Page No 25., I.No.5.31.2 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	*779.00*							
	Area Wieght age @ 6%	*46.74*							
	Total Rate in Rs	*825.74*							
	L Shape Drain								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	1.20		104.40		
							104.40	**825.74**	**86207.26**
7	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc ,complete as per the direction of engineer in charge-								
	Data rate								
		Sqm							
	Total Rate in Rs	*1757.00*							
	Damaged Portion						51.76		
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	0.90		78.30		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (208 - 223)		1	15	0.90		13.50		
							143.56	**1757.00**	**252230.53**
8	Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc ,complete as per the direction of engineer in charge-								
	Data rate								
		Sqm							
	Total Rate in Rs	*4725.00*							
	Attur Main road from Veerabhadreshwara temple road								
	Culvert		1	8	1.50		12.00		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Culvert		2	7	1.50		21.00		
							33.00	**4725.00**	**155925.00**
	Sub total-1								**1378996.15**
	ROAD WORKS								
9	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301								
	(Page No 143., I.No.19.14 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	*46.00*							
	Area Wieght age @ 6%	*2.76*							
	Total Rate in Rs	*48.76*							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00	0.300	182.70		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (42 - 87)		1	45	4.50	0.300	60.75		
	Ch: (101 - 223)		1	122	6.00	0.300	219.60		
	Post office road from Attur main road to Dead end								

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Ch: (0 - 157)		1	157	4.50	0.300	211.95		
							675.00	**48.76**	**32913.00**
10	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method Close graded granular sub-base material as per 400-1 For Grading- II Material **(Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	***1571.00***							
	Area Wieght age @ 6%	***94.26***							
	Total Rate in Rs	***1665.26***							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00	0.150	91.35		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (42 - 87)		1	45	4.50	0.150	30.38		
	Ch: (101 - 223)		1	122	6.00	0.150	109.80		
	Post office road from Attur main road to Dead end								
	Ch: (0 - 157)		1	157	4.50	0.150	105.98		
							337.50	**1665.26**	**562025.25**
11	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **(Page No 158., I.No.20.18 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	***1668.00***							
	Area Wieght age @ 6%	***100.08***							
	Total Rate in Rs	***1768.08***							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00	0.225	137.03		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (101 - 223)		1	122	6.00	0.225	164.70		
							301.73	**1768.08**	**533473.94**
12	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 **(Page No 161., I.No.21.6 of KPWD S.R 2016-17).**								
		Sqm							
	Basic rate	***26.00***							
	Area Wieght age @ 6%	***1.56***							
	Total Rate in Rs	***27.56***							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00		609.00		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (101 - 223)		1	122	6.00		732.00		

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
							1341.00	**27.56**	**36957.96**
13	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5								
	(Page No 161., I.No.21.7 of KPWD S.R 2016-17).								
	Basic rate	***11.00***							
	Area Wieght age @ 6%	***0.66***							
	Total Rate in Rs	***11.66***							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00		609.00		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (101 - 223)		1	122	6.00		732.00		
							1341.00	**11.66**	**15636.06**
14	KSRRB M500- 17. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507								
	(Page No 163., I.No.21.17.6 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	***6071.00***							
	Area Wieght age @ 6%	***364.26***							
	Total Rate in Rs	***6435.26***							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00	0.050	30.45		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (101 - 223)		1	122	6.00	0.050	36.60		
							67.05	**6435.26**	**431484.18**
15	KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500.9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509								
	(Page No 165., I.No.21.22.6 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	***6859.00***							
	Area Wieght age @ 6%	***411.54***							
	Total Rate in Rs	***7270.54***							
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		1	87	7.00	0.030	18.27		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (101 - 223)		1	122	6.00	0.030	21.96		
							40.23	**7270.54**	**292493.82**

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
16	KSRRB M600-1. Construction of dry lean cement concrete mix CC 1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383,) aggregate cement ratio not to exceed 15:1,aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601								
	(Page No,-176, I.No.22.1 of KPWD S.R 2016-17)								
		Cum.							
	Basic rate	*3761.00*							
	Area Wieght age @ 6%	*225.66*							
	Total Rate in Rs	*3986.66*							
	Post office road from Attur main road to Dead end								
	Ch: (0 - 157)		1	157	4.50	0.075	52.99		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (42 - 87)		1	45	4.50	0.075	15.19		
							68.18	**3986.66**	**271790.55**
17	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M30(at 360 kg per cum coarse aggregate @ 0.69 cum and fine aggregate @0.46 cum) , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specification								
	.(Page No 177., I.No.22.6.1 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	*5866.00*							
	Area Wieght age @ 6%	*351.96*							
	Total Rate in Rs	*6217.96*							
	Post office road from Attur main road to Dead end								
	Ch: (0 - 157)		1	157	4.50	0.150	105.98		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (42 - 87)		1	45	4.50	0.150	30.38		
							136.35	**6217.96**	**847818.85**
18	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 7kms.								
	.(Refer Table. Page No.140)								
		Cum.							
	Basic rate	*90.40*							
	Total Rate in Rs	*90.40*							
				For item no		2		246.05	
				For item no		9		675.00	
							921.05	**90.40**	**83262.92**
									3107856.53
				Sub total-2					

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	ROAD FURNITURES								
19	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 185, I.No.24.15 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	**512.00**							
	Area Wieght age @ 6%	**30.72**							
	Total Rate in Rs	**542.72**							
	Road Marking								
	new contruction								
	Attur Main road from Veerabhadreshwara temple road								
	Ch: (0 - 87)		2	87	0.10		17.40		
	Veerabadreswara main road from Ragi mill to Attura main road								
	Ch: (101 - 223)		2	122	0.10		24.40		
							41.80	**542.72**	**22685.70**
	Sub Total-3								**22685.70**
	Total								**4509538.38**
20	Cost towards Preperation of DPR,PMC/QC @ 1.5%								**67643.08**
21	**Cost of Plastic@ 8% of bitumen qty for BC**	**Kg**	1	453.79				**27.00**	**12252.45**
22	**Cost towards KIRDL Charges @ 9%**								**405858.45**
23	Misellenous and other charges								**4707.64**
	Grand Total								**5000000.00**

Certificate:-

1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Mecadez Core Technologies Pvt. Ltd.

Consultant:
For M/s Mecadez core technologies pvt ltd

Asst. Engineer
Ward No:3
BBMP

AEE
yelahanka Sub division
BBMP

Executive Engineer
yelahanka division
BBMP

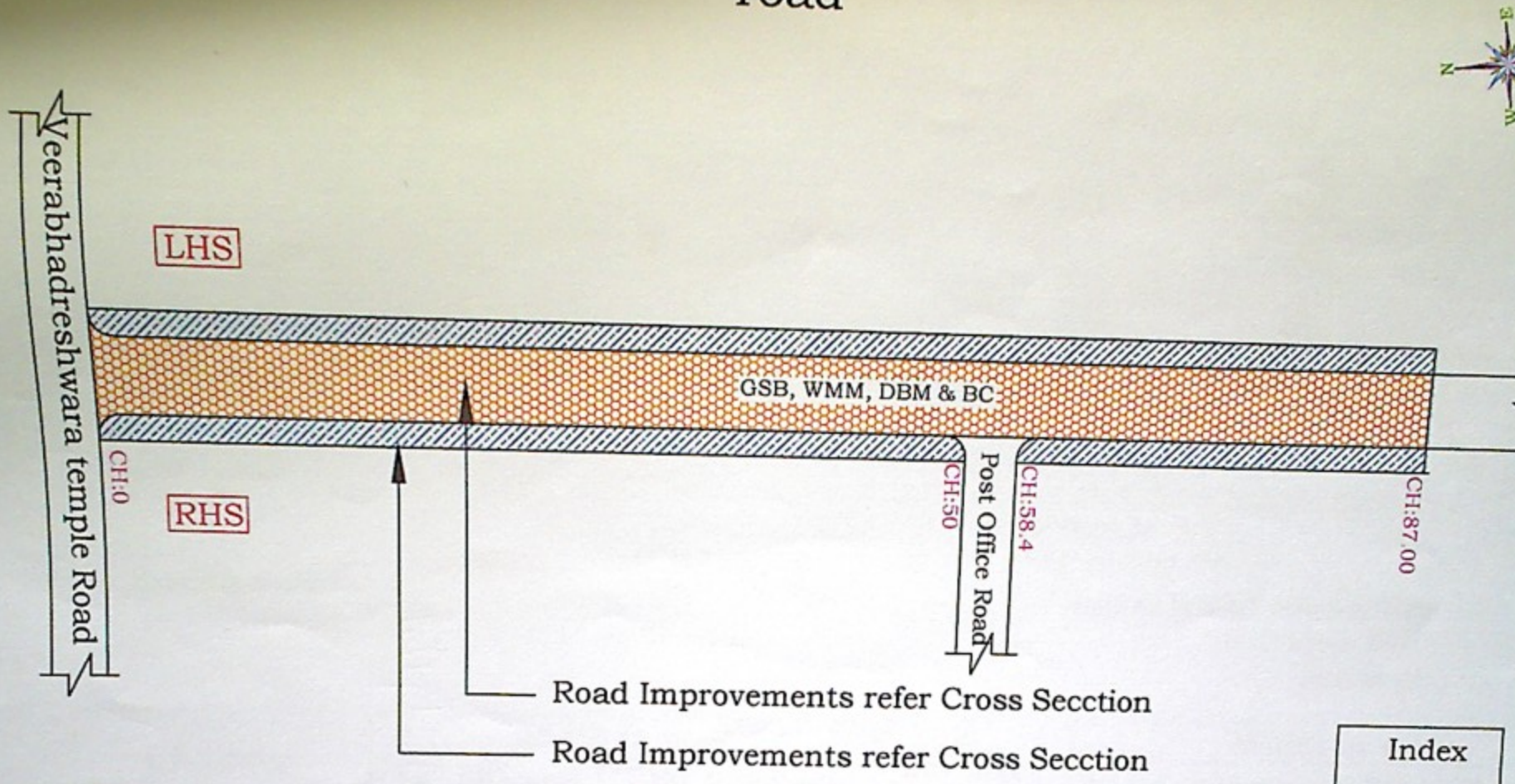
ADMINISTRATIVELY SANCTIONED FOR Rs. 50.00 lakh
Rupees fifty lakh only
Under Q-3089
Registered as EE ....9....
Subject to co ed in
enclosed memo EE /91....
Dt ctioned
ICL/ea/RS/37/16
dated 18/3/2017 of - 50.00 lakh.

Commissioner

Technical Sanction
Accorded For 50.00 lakh Rs.
Head of A/C P3089
CER NO : 204 Dt: 24/03/17

TA CE (YNK).

Attur Main Road from Veerabhadreshwara temple road



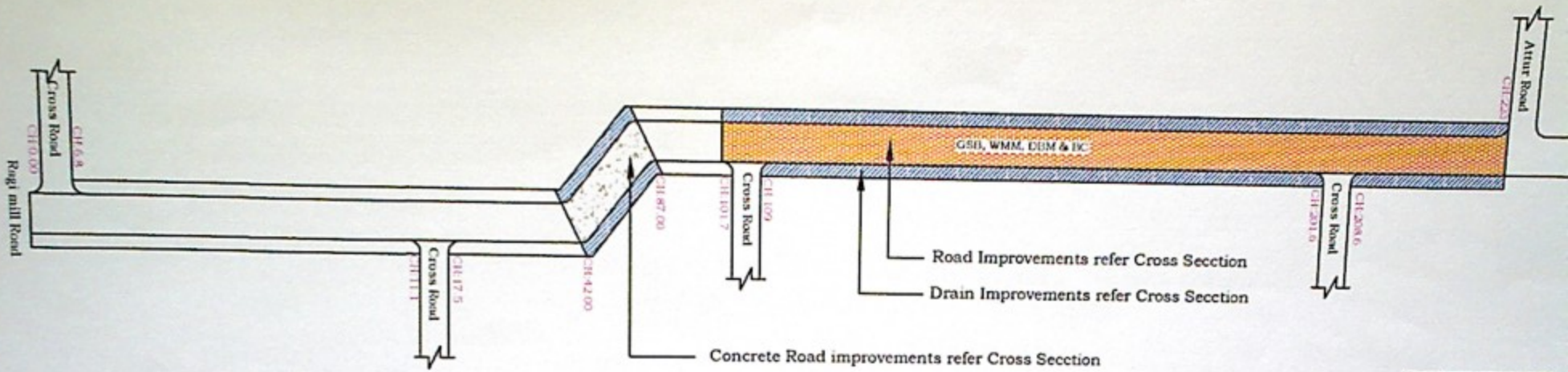
Assistant Engineer
Ward No - 3
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Improvements to Roads and drains in Attur Village, Govt School road, Post Office road of Attur ward no. 03	Strip Plan	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Mecadez Core Technologies Project Management and Co No.103, 1st Main Road, Magadi Main Road, Kott Bangalore-56009

Veerabadreswara main road from Ragi mill to Attura main road



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- BC Road
- Concrete Road
- Drain

Assistant Engineer
Ward No - 3
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Improvements to Roads and drains in Attur Village, Govt School road, Post Office road of Attur ward no. 03	Strip Plan	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Mecadez Core Technologies Private Project Management and Conultanc No.103, 1st Main Road, 3rd Cross Magadi Main Road, Kottigepalya, Bangalore-560091